

RECEIVED
CENTRAL FAX CENTER

REMARKS

JUN 04 2007

The application has been amended to correct the cited informalities, to distinguish the claimed invention over the cited prior art, and to place the application, as a whole, into *prima facie* condition for allowance at this time. Substantial care has been taken to avoid the introduction of any new subject matter into the application as a result of the foregoing amendments.

Claims 1 - 4 have been rejected under 35 U.S.C. 103(a) as being unpatentable over *Wakihira et al.* (Japanese patent application 03117507 A) in view of *Imanaga et al.* (US 4,983,079). Claims 5 and 6 have been rejected under 35 U.S.C. 103(a) as being unpatentable over *Wakihira et al.* in view of *Crisp*, US 2,769,355. Claim 7 has been rejected under 35 U.S.C. 103(a) as being unpatentable over *Wakihira et al.* in view of *Crisp*, US 2,769,355, and further in view of *Guehring et al.*, US 6,213,692. Claims 8 - 11 have been rejected under 35 U.S.C. 103(a) as being unpatentable over *Wakihira et al.* in view of *Crisp*, US 2,769,355, and further in view of *Guehring et al.*, US 6,213,692. Applicant respectfully traverses the Examiner's substantive bases for rejection of the claims.

Applicant has amended claim 1 to substantially incorporate the subject matter of dependent claims 2 and 4. As the Examiner has correctly noted, *Wakihira et al.* discloses a drill bit, wherein $\alpha_1 = 98 - 112^\circ$. Applicant has amended claim 1 to incorporate the limitation that $\alpha_1 = 80 - 97^\circ$, which is outside of the range set forth in *Wakihira et al.* The aforementioned reference specifically emphasizes that α_1 be in the range of 98 - 112 $^\circ$ (see, e.g., the "Patent Abstracts of Japan" entry of the foregoing reference, being submitted contemporaneously herewith, as part of Applicant's Information Disclosure Statement). Accordingly, Applicant respectfully submits that the Examiner's proposed combination of the *Wakihira et al.* and *Imanaga et al.* references is incapable of teaching or suggesting the invention of Applicant's amended claim 1, in that the *Wakihira et al.* reference may *not* be modified to encompass the range for α_1 as set forth in claim 1, because that would amount to a frustration of the goals and purposes of that reference.

Accordingly, Applicant respectfully submits that claim 1, as amended, patentably distinguishes over the cited prior art. Therefore, reconsideration and withdrawal of the rejection of claim 1, and allowance thereof, are respectfully solicited.

Inasmuch as dependent claims 3, and 5 - 7 merely serve to further define the invention of independent claim 1 which itself should be deemed allowable, reconsideration and withdrawal of the rejections of claims 3 and 5 - 7, and allowance thereof, are respectfully solicited.

Applicant submits that the application as a whole, including all of claims 1, 3 and 5 - 7, is in *prima facie* condition for allowance, and reconsideration and allowance of the application as a whole are respectfully solicited.

Should anything further be required, a telephone call to the undersigned, at (312) 456-8400, is respectfully invited.

Respectfully submitted,
GREENBERG TRAURIG, LLP

Dated: June 4, 2007


Douglas B. Teaney
One of Attorneys for Applicant

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this AMENDMENT AND COMMUNICATION is being transmitted via telecopier, to the United States Patent and Trademark Office, to the attention of Examiner Eric Andrew Gates, Art Unit 3722, to telecopier number 571-273-8300, on June 4, 2007.

